

Application No. 10/606,562

Amendments to the Claims:

Listing of Claims:

1. (Original) A cleaning apparatus comprising:

a cleaning element;

a synchronizer that places a predetermined section of the cleaning element in alignment with a respective ejector; and

an actuator that moves the cleaning element against the ejector with which the respective portion of the cleaning element has been aligned to clean the ejector.

2. (Original) The apparatus of claim 1 wherein the cleaning element services at least two ejectors and a respective portion of the cleaning element is dedicated to each of the at least two ejectors.

3. (Original) The apparatus of claim 2 wherein the at least two ejectors are printheads of an ink jet printer.

4. (Original) The apparatus of claim 3 wherein the at least two ejectors comprise at least four ejectors in a color ink jet printer.

5. (Original) The apparatus of claim 1 wherein the cleaning element services at least one ejector applying at least one fluid that possesses at least two properties and respective portions of the cleaning element are dedicated to each of the at least two properties.

6. (Original) The apparatus of claim 5 wherein the at least one fluid is ink and the at least two properties are colors so that a respective portion of the cleaning element is dedicated to each color of ink.

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7. (Original) The apparatus of claim 6 wherein there are at least four colors.

8. (Original) In an inkjet printer including a plurality of printheads, a printhead cleaning apparatus comprising:

a cleaning element for the plurality of printheads;

a synchronizer that places a predetermined section of the cleaning element in alignment with a respective one of the plurality of printheads; and

an actuator that moves the cleaning element against the plurality of printheads to clean the respective printhead with which the respective portion of the cleaning element has been aligned.

9. (Original) The apparatus of claim 8 wherein the cleaning element services at least four printheads and a respective portion of the cleaning element is dedicated to each of the at least four printheads.

10. (Original) The apparatus of claim 9 wherein the inkjet printer is a color inkjet printer and the at least four printheads are arranged in the color ink jet printer.

11. (Original) The apparatus of claim 8 wherein at least one printhead applies at least one fluid that possesses at least two properties and respective portions of the cleaning element are dedicated to each of the at least two properties.

12. (Original) The apparatus of claim 11 wherein the at least one fluid is ink and the at least two properties are colors so that a respective portion of the cleaning element is dedicated to each color of ink.

13. (Original) The apparatus of claim 12 wherein there are at least four colors.

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14. (Original) The apparatus of claim 8 wherein the plurality of printheads ejects at least one fluid that possesses at least two properties and respective portions of the cleaning element are dedicated to each of the at least two properties.

15. (Original) The apparatus of claim 8 wherein the synchronizer comprises an actuator responsive to a rotary encoder associated with the cleaning element.

16. (Original) The apparatus of claim 8 wherein the synchronizer comprises an actuator responsive to a light sensor associated with the printhead.

17. (Original) A method of cleaning a plurality of ejectors comprising:
providing a cleaning element;
allocating sections of the cleaning element for use with respective ejectors;
aligning an allocated section of the cleaning element with its respective ejector; and
moving the cleaning element against the respective ejector with which the respective portion of the cleaning element has been aligned, thereby cleaning the ejector.

18. (Original) The apparatus of claim 17 wherein the plurality of ejectors are printheads of an ink jet printer.

19. (Original) The apparatus of claim 17 wherein the plurality of ejectors comprise at least four printheads in a color ink jet printer.

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20. (Original) A method of cleaning at least one ejector comprising:
providing a cleaning element;
allocating sections of the cleaning element for use with respective ejected fluids that the at least
one ejector ejects;
aligning an allocated section of the cleaning element with an ejector from which its respective
ejected fluid has been ejected; and
moving the cleaning element against the ejector with which the respective portion of the
cleaning element has been aligned, thereby cleaning the ejector.

21. (Original) The method of claim 20 wherein the ejected fluids possess properties that, were
the ejected fluids to be mixed, would produce undesirable results.

22. (Original) The method of claim 20 wherein the ejected fluids comprise ink and the
properties comprise colors so that a respective portion of the cleaning element is dedicated to each
color of ink.

23. (Original) The method of claim 22 wherein the properties comprise at least four colors.

24. (Currently Amended) The method of claim 20 further comprising establishing an initial
position of the cleaning element roller, establishing an initial position of the printhead, and ensuring
that a proper allocated section of the cleaning element roller be aligned with its respective printhead
when printhead and cleaning element roller collide.

25. (Original) The method of claim 24 further comprising associating a rotary encoder with a
cleaning roller motor.

26. (Original) The method of claim 24 further comprising associating a translation sensor with
the printhead.

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27. (Currently Amended) The method of claim 26 wherein the translation sensor is a linear encoder.

28. (Currently Amended) The method of claim 24 further comprising providing a light sensor associated with one of the cleaning element ~~roller~~ and the printhead.

29. (Currently Amended) The method of claim 28 further comprising providing a flag on a drive gear of the cleaner element ~~roller~~, and providing a light sensor comprises arranging a light interrupt sensor responsive to the flag.

30. (Currently Amended) The method of claim 24 further comprising providing a cleaning sump into which the element ~~roller~~ travels and deposits material cleaned from the at least one ejector.